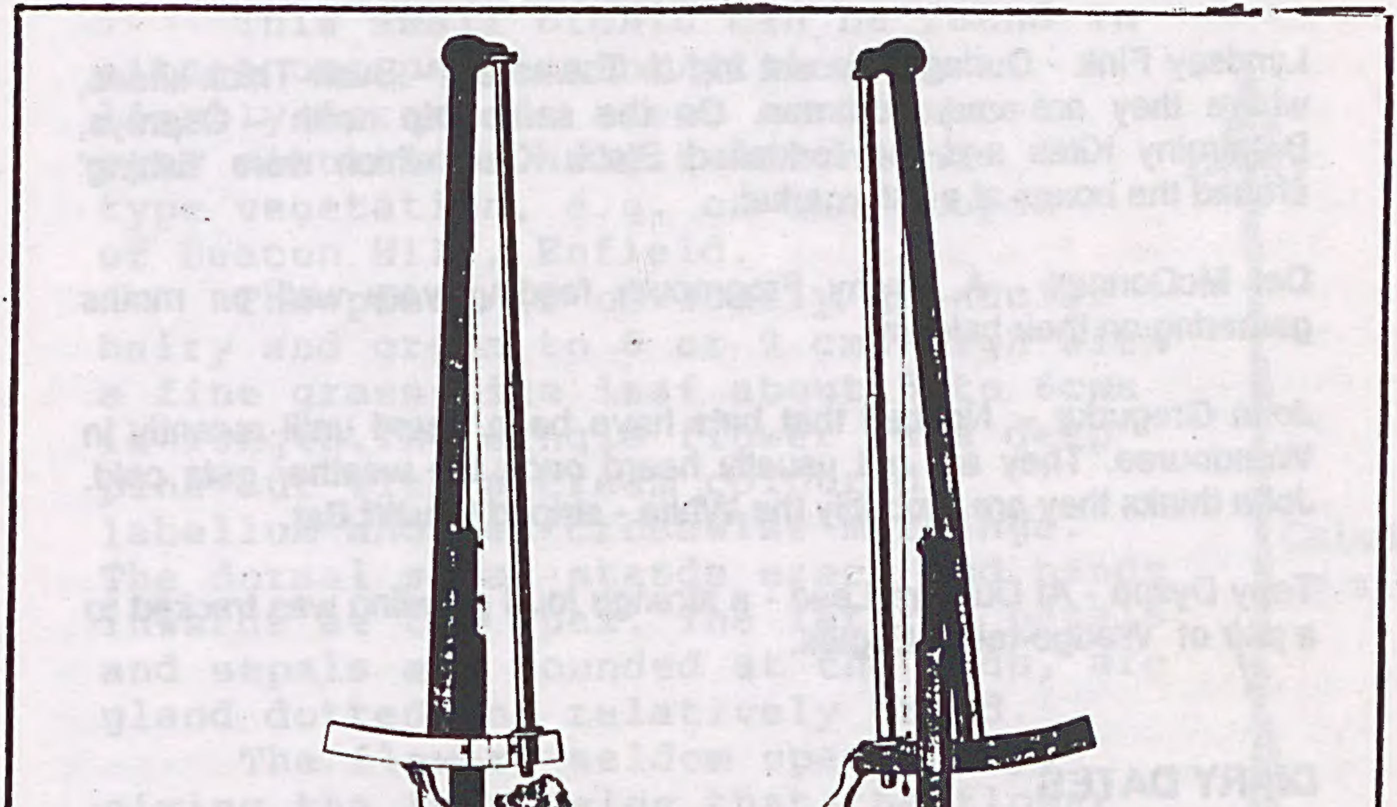
Field Naturalists Club of Ballarat
Incorporated

July 1995

EXCURSION-NEWS SHEET

Meeting	**Jul 7**	**Mr A Dyson: Astronomy Night**
Meeting	**Aug 4**	**Mrs A Barlow and Mrs D Brooke: A Himalayan Experience**
Excursion	**Jul 9**	**University of Ballarat Arboretum: Mr J Gregurke (half day excursion)**
Excursion	**Aug 6**	**Yarrowee Creek Walk: Mrs S Davison (half day excursion)**



President: Mr J Gregurke
Secretary: Mr L Fink
Treasurer: Mr G Binns
Editor: Mr A Dyson

PO Box 328W, Ballarat West 3350

MEETINGS are held at the School of Mines & Industries, Art Building, Lydiard St. Sth., 7.30 pm.
EXCURSIONS start at "Book City", cnr. Sturt and Armstrong Sts. 9.30 am. (full day outings) or 1.30 pm (half day)

FIELD NOTES

Ken McDonnell - During the warmer weather at the end of May magpies have been very active at Invermay. A Yellow-tufted Honeyeater seen in a gall infested Black Wattle. Also present were the White-eared and Yellow-faced Honeyeaters, but the Yellow-tufted is a rare sight. Ken quoted Roger Thomas as saying there are occasional single sightings in the Ballarat area.

Carol Hall - At Lorne - female Satin Bowerbirds in groups of 3 or 4.

Ken Hammond - Grey Fantail in his Wendouree garden, they appear there during the winter months. A Lewin's Rail seen at Newstead late in May. Also Flame Robins and Diamond Firetails.

Lyndsay Fink - During a recent trip to Townsville - Bush Thick-knees, where they are very common. On the same trip north - Ospreys, Brahiminy Kites and the forktailed Black Kites which were 'fishing' around the boxes at a fish market.

Del McDonnell - A Tawny Frogmouth feeding very well on moths gathering on their balcony.

John Gregurke - Noticed that bats have been heard until recently in Wendouree. They are not usually heard once the weather gets cold. John thinks they are probably the White - striped Mastiff Bat.

Tony Dyson - At Durham Lead - a strange loud growling was tracked to a pair of Wedge-tailed Eagles.

DIARY DATES

August 18, 19 and 20 - WVFNCA Campout will be held at Boundary Bend. Bush camping, BYO everything including water. Information sheet expected from G Pearse shortly.

Wednesday 19 July - Committee meeting - [redacted] at 7.30pm. (John Gregurke)

ORCHIDS of the BALLARAT DISTRICT

No. 19 of a series

Scientific Name : Caladenia pusilla
(syn. C. carnea var. pygmaea)
pusillus = tiny, puny.

Common Name : Tiny caladenia

Flowering time : October to November

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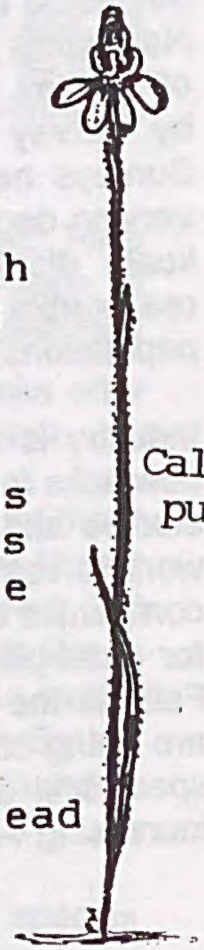
This small orchid can be found in either our peppermint/stringybark lightly forested areas or in more open situations amidst heathland type vegetation, e.g. on the slopes of Beacon Hill, Enfield.

The plant is obviously glandular hairy and grows to 8 or 9 cms high with a fine grass-like leaf about 5 to 6cms in length.The single flower is a deep pink but with a cream coloured labellum and red crosswise markings. The dorsal sepal stands erect and bends inwards at the apex. The lateral petals and sepals are rounded at the ends, are gland dotted and relatively broad.

The flowers seldom open fully, giving the impression that the flower is just past the bud stage.

This unusual caladenia is widespread in the district but I have never considered it to be a common plant in any one area.


Caladenia pusilla

Patricia Murphy

SMALL MAMMALS

Mr Pat Previtt spoke at our June meeting on this fascinating topic. Pat works with the Science Faculty at the University of Ballarat.

Pat defines a small mammal as one weighing only a few grams (such as the planigales - some of these tiny marsupials may weigh only 4 to 5 grams) - to those weighing about 250 grams. Most small mammals are nocturnal and quiet so they are not obvious. To be observed they have to be looked for carefully, and often have to be tracked. Few of us know much about them and fewer have seen many of them. Even "spotlighters" searching at night will be lucky to see animals at ground level.

The Arthur Rylah Institute has established the Victorian database for Victorian fauna and an atlas of Victorian wildlife. They are very interested in any information provided by active groups (such as Field Naturalists Clubs) and in particular in information about the distribution of species. Many of their data sheets are distributed to, and completed by, survey groups such as those organised by Pat at the University. Surveys help form the picture of distribution but there are gaps of varying degrees in the overall pattern - e.g. - there is good data on the koala distribution but information on phascogoles is limited. Until reasonable data is available any trends or changes in animal populations cannot be noted.

Industry is now becoming more involved with survey work. The CNR now asks for more vigorous faunal surveys in any Environmental Impact studies and environmental consultants and students are finding more work to satisfy DCNR requirements. Pat has been asked by 9 mining companies to help with surveys on their behalf. Of interest in our area for example is the current faunal survey being done at the McKenzie Falls in the Grampians where tourist facilities (including a restaurant) are being considered. Pat has also been working on a full inventory of species in the Otway National Park for the VNPA. Although work is increasing very few systematic surveys have yet been conducted.

A few privately sought surveys are conducted. John Walmsley who has an environmental park in S.A. has asked for a detailed survey in the area of his second park in western N.S.W. This is an area of particular interest as no detailed studies have ever been done there.

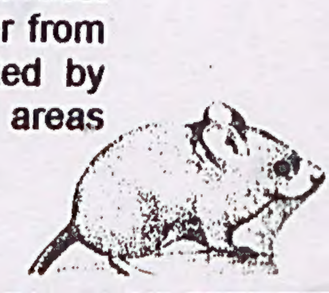
New discoveries are still being made - in particular the arid areas of Australia hold fauna which has still not been recorded.

Pat spoke of the classification of some of the small mammals and showed slides of many of them. Some of the better known species are the carniverous marsupials, such as the antechinus and the dunnart. There are "about" 9 named antechinus and each has a specific distribution. They tend to eat insects, lava and small invertebrates and are well adapted with a high cusp on their many pointed teeth which are also ideal for capturing prey. They are aggressive feeders and tend to have aggressive natures - they establish dominance hierarchies with the strongest securing better habitats and mating priority. All adult males die from stress-related illnesses soon after mating - these males die at about 11 months and only pregnant females exist in the population for about 2 months until the young develop. 6 to 12 young are born and the young remain attached to the teats (there is no pouch) for 40 or so days until they detach are left in the nest while the mother forages. Some will die early if there are not enough teats for the larger litters.

The dunnarts are also short lived - they rarely survive 12 months. They have an extended breeding season of about 9 months from June to February therefore 2 litters may be born in one season. The gestation period is very short - the young are born only a couple of weeks after mating and then attach to teats enclosed in a well developed pouch.

There are many of rodents amongst the small mammals. Most of them are native. Three introduced species are the fairly common House Mouse, the Black Rat and the Brown Rat. The native Bush Rat and Swamp Rat are both widespread in suitable habitats. The Bush Rat is abundant in the dense forest understory, the Swamp Rat in the wetter areas from coastal swamps to rainforests and sedgelands. The Broad-toothed Rat has a much more disjointed distribution - usually found in cool wet alpine heathland and tall open forests.

Pat mentioned the many bats found in Australia - there are 20 species in 5 families in Victoria including 2 that are cave roosting. Bats have small requirements - they need suitable roosting sites (such as trees, caves, buildings), and access to a rich source of insects. They can roost and then feed 10 to 12 kilometres from the roost site. Bats differ from most other species of our mammals. They are not so affected by fragmentation of the environment and survive very well in rural areas and in towns.



Pat spoke of the methods of surveying live captures such as trapping with Elliott traps (cage-like traps). There are some problems with this method and the animals experience some degree of stress. They may lose some body heat and they are deprived of their normal feed for a time. Nest boxes are very satisfactory as, providing an animal makes use of them, they act as a permanent "home". Hair tubes require microscope use to diagnose the hairs left by a visiting animal. Scat analysis involves the examination of droppings, including the droppings of predators to see what they eat. Pitfalls are sometimes used but are not in favour. Spotlighting can be disturbing and Pat expressed interest in the nightscope which amplifies the available light to enable observation. Road kills can provide data for survey teams.

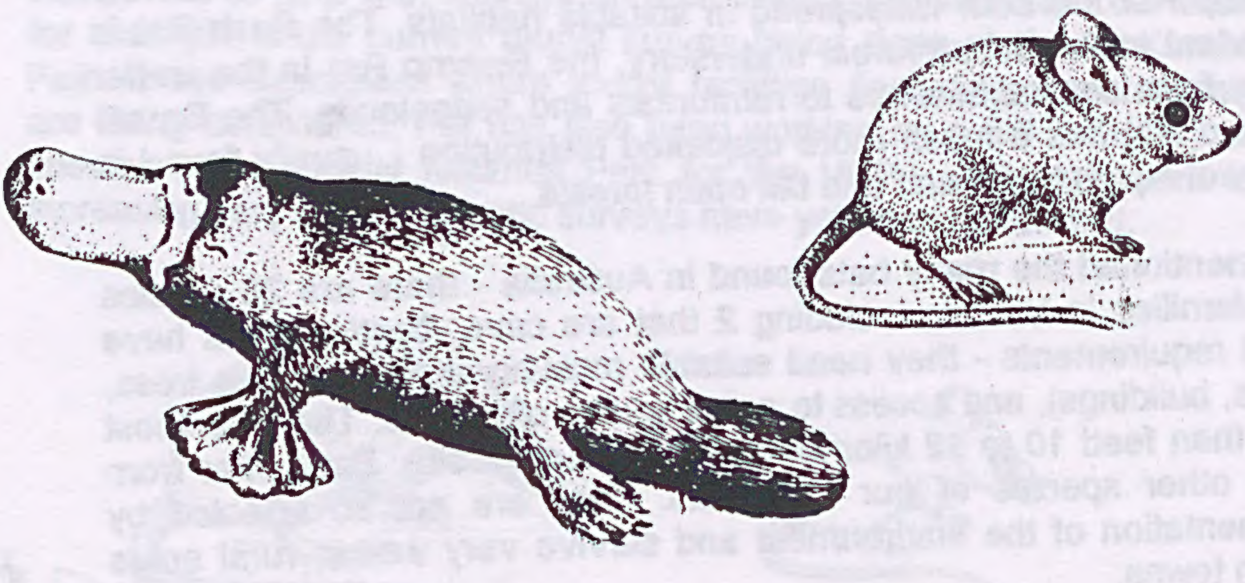
Pat showed many slides to illustrate his talk to us. Many of these were taken during a survey in the Otways. It was useful to see students demonstrating animal holds, and to see the various types of traps.

Platypus

Pat has been working on platypus study on the Mount Emu Creek. Some animals have been tracked using various types of battery operated "packages" with varying success (mainly due to packaging problems resulting in water leakage over aerials). Some tagged animals have been recaptured but only over a short period. The creek has several ideal stretches for platypus - high, solid banks and large River Red Gums with widespread roots enabling burrowing.

Our thanks to Pat for such an interesting and informative evening.

VD



Saving the Dunnart

An article in the Sunday Herald Sun (23 April 1995) concerns the Julia Creek Dunnart which was once thought to be extinct. Until only 4 years ago it had been seen only in museums. Dr Pat Woolley, an associate professor of zoology at LaTrobe University, rescued some of the animals from grassy plains near the small town of Julia Creek, in north-west Queensland. Dr Woolley began her research for the species after Julia Creek residents noticed that their cats were bringing the creatures home.

Dr Woolley has raised 3 generations of dunnarts to produce a colony of 30 animals. She is quoted as saying "They are very attractive little animals because they have long faces and bright eyes". (They have also been described as looking like a minature possum with a black stripe down the forehead).

The article goes on to say that little is known about the dunnart's life in the wild except that it eats insects and is preyed upon by owls and cats.

Regent honeyeaters, a species of the box-ironbark forests, are now threatened and are decreasing in range and numbers.

Australian Mammals Found in the Ballarat Area No5

Ordinary, Bats

Family VERSPERTILIONIDAE.

Verspertilionid Bats share a certain skeletal and dental characteristic but the family is so diverse that there are few external features that serve to distinguish all of them from members of other bat families, for example, while the majority lack a nose leaf this structure is weakly developed in Longeared Bats of the genus Nyctophylus. The tail is long with the membrane stretching almost to the tip this in itself, serves to distinguish Verspertilionids from other Bats.
It is the most successful family one third of all bats are verspertilionid. They are found in every Continent and, thanks to their superior physiological adaptions, particularly that they can hibernate, they can extend into much cooler parts of the World than any other group.
Some genera have a world wide distribution and four of the nine genera in Australia (Pipistrellus, Myotus, Eptecicus and Nycticius) fall into this category. Three genera (Miniopterus, Phoniscus and Murina) are widespread throughout the old world. Only two (Nyctophilus and Chalinolobus) are centred in the Australian, New Guinea region. Almost half of the Australian Bat species are Verspertilionids.

Elfin